

Abstract

5 A polymer masking flux for fabricating external contacts
on semiconductor components includes a polymer resin, a
fluxing agent and a curing agent. The flux is configured to
clean contact pads for the external contacts, and to hold the
external contacts on the contact pads during a reflow bonding
process. The flux is also configured to cure or polymerize,
10 to form donut shaped polymer support members for the external
contacts. In addition, the flux is configured to mask
conductive traces in electrical communication with the
contact pads, and to electrically insulate the external
contacts from the conductive traces. The external contacts
15 can be pre-formed solder balls, or deposited solder bumps.
In the case of solder bumps, the flux can include solder
particles configured to coalesce into the solder bumps.